BULLETIN

OF THE

SOUTH INDIAN MEDICAL ASSOCIATION.

MARCH 1933.

The Medical Budget.

This year's debate in the local Legislative Council is characterized by the almost unanimous condemnation of the growing tendency of the government to spend excessively large sums of money on buildings and the uniform appreciation of the honorary medical scheme and widely expressed desire that the scheme should be rapidly expended. One might deplore the spending of such a large portion of the resources available on mere buildings; but the existing institutions are some of them so old and cramped that in view of the increasing demand for accommodation, many of them have to be remodelled or entirely newly built. And hospital buildings should be airy and cheerful. But all this does not warrant the State to be extravagant on mere embellishment and costly massiveness. We are glad that the members of the Legislative Council have drawn the attention of the government to this growing evil. The need of the Province is more institutions in places where none is at present available, the extension and improvement of existing ones and finally building new hospitals to replace old and insufficient institutions. The government should decide early the new centres where the building of a hospital with the necessary out-patient clinic would vastly increase the facilities of medical relief. Such of the existing institutions as may be worth retaining and renovating might be improved by necessary extensions. And those that are old and are condemned as dangerous buildings should be replaced by new ones in the order of urgency and usefulness. Before embarking on the construction of big hospitals at headquarter towns it is essential to take into consideration the relief that might be felt at these hospitals by the provision of smaller institutions in the taluk centres, and elsewhere. If small, but, efficient hospitals are provided in the taluk centres, the demand for accommodation at the headquarters and Presidency hospitals should certainly diminish.

Thanks to the sustained efforts of men like the late Dewan Bahadur Arogyasami Mudaliar, Mr. V. T. Arasu and Mr. A. B. Shetty, the Council and the Government are now fully convinced of the utility of the *Honorary Scheme.* We are pleased to find that others like Mr. T. A. Ramalingam Chettiar are beginning to take interest in questions of medical relief. The Chief Minister in his speech referred to the scheme as still an experiment. We are sure that it is merely from habit and not from conviction that he used that word. For, he has given out that if the stipendiary medical officers are not yet replaced by honorary men, it is not because of any defect in the honorary medical officers, but because the permanent men could not be immediately dispensed with. The hon'ble minister has however promised to report progress in this direction by the end of one year. The public and the Government are convinced of the possibilities of the

honorary medical scheme. The public is impatient that the government is not taking fuller advantage of the scheme. The government is willing and apparently anxious to extend it. It is also realized by all that the time is come to replace the paid men by honorary men as vacancies occur. The Committee that has been recently constituted by the Government to consider the further extension of the scheme has therefore a very important task to perform. It is for them to advise the government as to the proper lines on which to proceed. But we may be here permitted to mention the general belief that no scheme which does not take into account the eminently suitable conditions that obtain in Madras city for the great expansion of the scheme as well as for the replacement of, at least, some of the medical officers and teachers in the city hospitals and school is likely to commend itself to the public and the profession. We are fully aware that if the Committee arrives at such conclusions, its recommendations are likely to be strenuously opposed by a group of people who place the interests of the paid service above the common good of the State. At the conception of the scheme some of the long-headed members of the medical services were bitter against it since they sensed therein the gradual disappearance of many of their perquisites. Though the scheme was an experiment, they knew well that the experiment would succeed. For, they were well aware, though they would not say it, that the independent medical profession had in it men who were professionally at least as good as themselves. But as the honorary men were only supernumeraries the services got gradually reconciled to it, more especially as the honorary scheme has not produced the difficulties that were predicted. But now that the idea of replacement, however restricted it might be to begin with, is seriously considered, we can see the flutter and alarm that is spreading in their ranks.

Those who have been enjoying the security of paid service combined with the freedom of the private practitioner are certain to raise all possible objections to any advance in the direction of replacement of the paid men by honorary medical officers. They are shrewd enough to know that open and direct opposition to the wide spread desire of the public in favour of increasing *honorarization* of the hospitals and schools would be put down to blatant selfishness. We understand that their opposition would this time be made to appear to be for the good of the country and the better interests of the honorary scheme and the independent profession itself. We are sure that the Committee would go into this aspect with the necessary thoroughness and thus help the government to go forward with their policy of replacement of the stipendiary medical men by honorary officers.

The Medical Council Bill.

We have often dealt with this Bill in these pages. We have pointed out some of the gross errors in it and we hope that we have conclusively proved that the principle underlying the Bill is unsound and that the manner in which it is sought to be thrust on the country is entirely derogatory to her self-respect. In this issue we do not propose to enter into the merits of the Bill. But some of the speeches made in the Legislative Assembly in connection with the Bill are noteworthy. We are indeed proud to know that the best speech on the Bill was that of the representative of the City of Madras. That Mr. A. Ramaswami Mudaliar's criticism of the fundamental defects of the Bill has gone home is evidenced by Sir Fazl-i-Hussain's fling at Madras on her domination. We congratulate the

Diwan Bahadur on the effective way in which he has pointed out the drawbacks and has exposed the hollowness of the denial of the charge that the Bill is the result of dictatation from the British Medical Council.

The speech of the Member in charge of the Bill, as reported in the papers, was not a happy one. And some of the arguments are certainly untenable. He made much of the heavy sense of responsibility—responsibility of himself and of the Assembly. Some of his assertions are really curious. He agrees that India requires a large number of medical men. He asserts that the graduates are expensive. He concludes therefore that the Government should provide *cheap* medical men for the country though he concedes that they are less efficient than the graduates. We do not think that he was particularly thoughtful when he made that statement. He affects to be very solicitious about the poor masses. He wants to provide them with what he assumes they need—a cheap agency, even if it be inefficient to attend to their health.

The country has long been agitating that the administration is expensive and that the officers are paid salaries far beyond her resources. Similarly the country has been criticising the military expenditure as being too heavy for her. We should be very glad to know why he and the Government have not ventured to supply these services at less cost even if the efficiency would be thereby sacrificed. If efficiency and not expense be the aim in these services, it is most unreasonable to assert that efficiency could be sacrificed when it relates to the health of the population of the country. Are the lives of its citizens the least important of the concerns of the Government?

There appears to be a little confusion in the minds of some about the expensiveness of the graduates. We are not sure whether they refer to the capacity of the state to educate them, or to employ them in service or to the ability of the general public to pay adequately for the services of the graduates. If the institutions meant for training medical men to the University standard are at present more expensive than those of the medical school meant for licentiates, it is certainly not beyond the competence of the state to devise methods of medical education of the proper standard on a more economical basis. As for employing graduates in government service, we agree that it is beyond the resources of this country to pay adequately for their services if all medical men available are to be in government employ. It would be impossible to do that even if all medical men in the country were licentiates. Our views against a paid general medical service are well known. *The paid services have been a great hindrance to the rapid expension of medical relief to the country.* But if the Government persists in the policy, it has itself to blame and it has no right to use that as an argument against raising the standard of medical education to a uniform high level.

The general public of a country whose average individual income is admittedly low cannot certainly pay adequate remuneration for medical service. But if medical education is improved and if medical relief is rationally organized, it should be easily possible for the community to engage its doctors on reasonable living wages. One can understand the need and the usefulness of an inferiorly trained class of men in professions like Engineering and Law. Here the subordinates can be utilized to carry out the details under the instructions and

guidance of higher qualified men. But in medicine where in the great majority of cases each man has to carry out the whole duty without the possibility of help or guidance of a higher qualified man, it would be disastrous to produce deliberately a class of inferior qualified doctors.

Sir Fazl-i-Hussain is greatly concerned about the difficulties of graduates in Medical Associations. He seems to think that since the gradutaes are in a minority, they yield to the views of the licentiates even when they disagree. We are afraid that the Honourable Member has been very badly let down by his informants. We are not aware of any such terrorism in the Medical Associations of this part of the country. We are proud to know that in many matters, the Licentiate members of the South Indian Medical Union have been one with the graduate members in voting down proposals which may appear to be in the interests of the former but were detrimental to the larger interests of the profession and the country. The graduates have similarly turned down proposals which were advantages to them but unfair to the profession at large. This question of inclusion of Licentiates in the Common Register is one such. It might tickle the vanity of the graduates to be treated by the Government as a higher class, a class apart from the rest. But they know well, that if the profession is to advance and take its rightful place in the scientific world the basic standard of medical education must be greatly improved. To provide for inefficient medical relief is a neglect of duty to the people and it is unworthy of this Government to contemplate a perpetuation of different castes in the profession. We might here assure Sir Fazl-i-Hussain and others of his opinion that there is no such bullying in the medical association and it is an insult to the honesty of graduates to say that they are afraid to speak out their minds for fear of offending the licentiates. It looks as if the Honourable Member is hard put to understand the unanimity with which the Bill has been condemned and in his distress he seems to have hit upon this ingenious but thoroughly groundless explanation.

Looked at from any angle, two-standard medical education is detrimental to the interests of the country. We hope the Honourable Member and the Assembly would take a long view and insist on a single high standard in Medical Education in this country before the Bill becomes law.

LOCAL SELF GOVERNMENT DEPARTMENT.

G. O. No. Ms. 554 P. H., Dated 10th March 1933.

Read the following papers:—

From the Surgeon-General, No. 1679-1 Est, dated 7th July 1932.

From the Surgeon-General, No. 1679-2 Est, dated 21st September 1932.

From the Surgeon-General, No. 1679-4 Est, dated 14th November 1932.

From the Surgeon-General, No. 1679-7 Est, dated 10th January 1933.

From the Secretary the South Indian Medical Union, dated 10th August 1932.

From the All-India Medical Licentiates Association, Madras Branch, dated 8th November 1932.

ORDER.

The Government are pleased to constitute a committee to consider the question of the further extension of the scheme for the employment of honorary medical officers in Government medical institutions in the Madras

Presidency. The personnel of the Committee will be as follows :—

(1) The Surgeon-General (President),

(2) Lt.-Col. F. C. Fraser, I. M. S.

(3) Rao Bahadur Dr. A. Lakshmanaswami Mudaliyar, V.H.A.S., F.C.O.G., B.A., M.D.

(4) Miss A. B. Hardy, M. R. C. P. (E.)

(5) Dr. K. C. Paul, M.D.

(6) Dr. T. Satakopan, M.D.

(7) M.R.Ry. K. B. Bhujanga Rao Avl., L.M.P.

(8) M.R.Ry. Rao Bahadur C. Natesa Mudaliyar Avl., L.M.S., M.L.C.

(9) Dr. P. Subbarayan, M.L.C.

2. The Committee will review the present position of honoraries and report

(i) the extent to which honorary medical officers may be appointed to the city and mofussil hospitals in addition to and in substitution for the existing paid medical staff, and

(ii) the best way of obtaining suitable men to serve as honoraries.

(By Order of the Government, Ministry of Local Self Government.)

S. G. SENGODAIYAN,

Deputy Secretary to Government.

Medical Relief.

SUNDAY CHRONICLE.

An interesting discussion on the policy of the Medical Department took place in the Legislative Council on Wednesday. Mr. T. A. Ramalingam Chettiar initiated it, and he drew attention to two important directions in which the Government could move with a view to enlarge the facilities for medical relief. As things are, much of the money spent in the name of the department goes towards the construction of costly buildings and the payment of salaries to officers employed in it. A poor province like ours can afford neither, and especially so when the vast bulk of the people have yet to be provided with means of relief when they fall ill. Far more than expensive hospitals luxuriously fitted up in the metropolis, what is wanted is a network of decently equipped hospitals in head quarters of districts and dispensaries throughout the countryside. Unfortunately, however, the policy of the Government has always been to favour the city at the expense of the mofussil, and hence it is that we find that, while tons of money are being poured out in extravagant schemes for buildings and equipment in the city, not even a respectable fraction of the amount is devoted to medical relief in rural areas. Similarly, in spite of the agitation in favour of the honorary system, the Government have not yet taken very kindly to it ; and the result is that, although there are several well-qualified and competent private medical men willing to take up honorary service in hospitals, the service of a mere handful only have so far been enlisted for the purpose. Even in Bombay the progress made in this respect is remarkable, some of the very best medical institutions having been made over to the charge of honorary men. Greater encouragement to the public-spirited among the independent medical profession will inevitably react to the financial advantage of the Government, but such encouragemet can hardly be looked for so long as the Government remain more amenable to the counsels of their service men with a vested interest than to principles of economy

and approved practice in other countries. Among the minor grievances ventilated in the Council may be mentioned at least two in view of their comparatively greater importance. One of the speakers suggested that "there should be a constant interchange of medical officers so that officers in the mofussil might have the benefit of experience and knowledge available in the city." Well, the advantages are too obvious to need elaboration. It is notorious that some of the officers have for years been attached to the hospitals in the city, thereby having an enormous but unjustified, advantage over their colleagues in the mofussil in the matter of facilities for enriching knowledge and gaining enhanced experience. Occasional transfers of these men will serve a two-fold beneficial purpose in the first place, intelligent mofussil officers will be enabled to come over to the city and profit by their work in the biggest hospitals in the province; secondly, the patients in the mofussil will not have to be taken all the way to the metropolis in order to secure the benefit of the best medical advice available. The argument is perfectly sound, therefore, that the Government should not concentrate in one place all the experts in the various branches of medical science and deny to the mofussilites opportunities of securing in their head quarters hospitals the same amount of professional skill as is to be had in the city. The other complaint voiced was with reference to the insistence that local bodies should indent for their medical requirements only on the Government Medical Stores. The cost of the medicines supplied by the Stores is invariably about 25 to 30 per cent higher than the market rate, and it is only natural that the local bodies should be grumbling at the loss entailed by the rules laid down by the Government. The Minister in charge said, in reply to the debate, that "the Government could not relax the rules relating to the purchase of medical stores by local bodies. Government had found that it was cheaper for those bodies to purchase their medical supply in the Medical Stores instead of in the open market. Besides, it was not merely the price that should count, but the quality of the medicines." The argument about "cheapness" is demonstrably absurd, while that about "quality" is merely an apologia for a policy which the Government are not prepared to give up for reasons best known to themselves. Both the contentions are, indeed, contrary to experience, and the Minister seems to have said merely what the Secretariat had put into his mouth. Equally unconvincing is the plea about "model institutions" in the city when the policy of favouritism at the expense of the mofussil is criticised. "Model institutions" are good in their own way, but the urgent need of the times is greater facilities and increased provision for medical relief, and these cannot be had if the craze for "model institutions" swallows up practically the whole of the resources and enthusiasm of the authorities.

In the Council.

Mr. V. T. Arasu: Mr. President, I am one with Mr. Ramalingam Chettiar in thinking that though we have been spending over this department larger sums every year, we have not been able to carry medical relief nearer the people than it has been some years ago. One of the means by which medical relief can be made more easily available to the poople at large is, as the same gentleman pointed out, by securing the co-operation of private agencies, by appointing honorary medical officers in our hospitals and dispensaries. For, admittedly the state of our finances do not permit of the appointment of paid officers in larger

numbers than we do at present. Speaking of this system of running our hospitals and dispensaries with the aid of honorary officers, I believe every one including my Honourable friend Mr. Basudev will agree with me when I say that we have now come to a stage when we can say with confidence that the system has, during the short time it has been in vogue, proved a tremendous success. The Surgeon-General in his latest report has testified to this fact, and has pointed out that this system has resulted in a saving of Rs. 1,85,000 to Government. This is only an indirect saving. For if we examine the pay bill of the Government we find no reduction. That is due to the fact that Honorary officers are still being considered as supernumeraries. We have at present as many as about one hundred honorary medical officers working in the Presidency. But in most cases these officers have not displaced the existing paid officers in those hospitals. The few paid officers who have been displaced by honorary officers have all been dumped into the teaching institutions. That is how we have the sorry spectacle of our teaching institutions having more teachers than students. This fact, *viz.*, that within the last few years there has been a considerable increase in the strength—in most cases unwarranted—of the staff in our teaching institutions, is admitted by the Surgeon-General also in his latest administration report. This I submit, Sir, is the reason why our pay bill has not come down inspite of the fact that we employ about one hundred honorary medical officers. If medical relief is to be made available to a larger number of people within the limited financial resources at the disposal of this Government, the only way is to employ honorary officers in larger numbers and stop recruiting paid men. As vacancies occur in the paid service, the Government should fill them up with honorary officers.

Mr. President, mention was made by some honourable members who preceded me that Government were wasting large sums of money over hospital buildings. I have absolutely no objection to the erection of new hospitals, and in fact I would go further and state that they should try and erect hospitals in all taluk headquarters. But I certainly object to the erection of palatial buildings like the remodelled General Hospital in Madras. Government have wasted 53 lakhs of rupees over this hospital. I know it is too late to think of it. Nevertheless I should like to take this opportunity to enter my emphatic protest against the erection of palatial hospital buildings. We do not want four storied buildings with glazed tiled walls and marble floors for our hospitals. What we want are clean, simple, and well ventilated buildings with, if possible, decently laid out gardens. I will give another instance of the collosal waste in our hospital building programme. Every one knows—including my esteemed friend Dr. C. Natesa Mudaliar who justified the expenditure on the General Hospital buildings—that in a climate like ours the doors of the wards should not be closed in any part of the day or night. As a matter of fact in no hospital have I seen banged doors, and yet, what do we find in many of the hospitals that are now being built? Massive wooden door-ways, each of which would have cost some thing like 150 or 200 rupees Why do you want, I ask, door ways which are never closed? A blank passage—with if necessary a screen—would do.

Speaking of the General Hospital, I am reminded of one or two new items of expenditure which the Government have budgeted for this year. I find from the Finance Committee's report that a sum of Rs. 50,139 (recurring) and a sum of Rs. 13,700 (non-recurring) has been sanctioned for the employment of additional staff and the

purchase of equipment for the new surgical block of the Ear, Nose and Throat department of the General Hospital. In the General Hospital there are now six regular operation theatres and one emergency operation theatre. Thus there are seven operation theatres for three surgeons. It is a well known fact that no surgeon does any operation work for more than three days at the most in any one week. When the existing seven operation theatres themselves are not fully engaged, why do you want another operation theatre? I presume this provision also includes the cost of certain instruments used in the treatment of E. N. and T cases. Sir, in answer to certain interpellations of mine, Dewan Bahadur Munuswami Naidu, who was then the Chief Minister, admitted that the Second Surgeon in the General Hospital (he is now the First Surgeon) has been provided for his personal use with a duplicate set of those instruments, another set being in the custody of the Civil Surgeon in charge of the E. N. and T. Clinic. Thus you will find, Sir, that in the General Hospital there are already two sets of the surgical instruments used in E. N. and T. treatment. Where then is the need for a third set? The other item of interest in the Finance Committee's report is the provision of Rs. 15,400 (recurring) and Rs. 440 (non-recurring) for additional staff for the X-Ray institute in the General hospital. In this connection I should like to point out that it is sheer waste to appoint medical men to this institute. What we want for the X-Ray institute are the services of technicians, and certainly not of medical graduate. It is the business of the Surgeon or Physician who is in charge of the patient to give directions for treatment and to interpret the radiographs When that is the case, why do Government go on appointing medical men on Rs. 200 and 300 when technicians could be got for less than Rs. 100. In the same way, there are many items of expenditure connected with the General Hospital which are open to criticism. I hope the Hon. Minister, who, I admit, is new to the department, will go into these matters carefully and see that money is not wasted in the manner in which it has been till now. Let him not be carried away by the advice of the experts in the department. They are all obsessed with the practice prevailing in the hospitals in the West, and therefore want to introduce the same standard in our country as well. But they forget the fact that our country is a poor country, and therefore we cannot afford to equip our hospitals in such a lavish manner as people in the West do.

Some members complained of lack of accommodation in certain hospitals. I know it is so, and that in the Gosha Hospital the state of affairs is scandalous. But we must also bear this fact in mind, *viz.*, that in many of our hospitals congestion can be relieved if choultries are opened as annexures to some of our big hospitals. I can speak of the Madras General Hospital with some authority as I have opportunities of visiting this hospital regularly. There are at present 554 beds in this hospital, and yet every day we hear of many patients being refused admission for want of accommodation. What is it due to? It is wrong to presume that all those who are there as in-patients deserve to be there. At least two hundred of them are chronic patients for whom the only possible treatment is the supply of nourishing food. Therefore if a choultry is opened somewhere nearby these patients can be transferred and the beds made available to deserving cases. The cost of running the hospital can also be minimised.

There is one other point about which I should like to make a pointed reference. I think it was the Hon. Member from Trichinopoly that said that

all our first rate men are concentrated in Madras city, and consequently the mofussil centres are suffering. I think there is much truth in his observation. By retaining officers in the Madras city for any length of time without posting them to mofussil centres there are three great dangers. Firstly, if we keep officers in any one place for a very long period, to use the phrase of the Hon. the Home Member they go on borrowing. That is exactly what is happening in Madras city now. Certain officers who have been in Madras have abused their positions. Of that I do not want to speak at any length as I am certain that government is fully aware of those instances, instances where in defiance of all medical etiquette and against all the rules framed by Government certain officers indulge in intensive private practice. Secondly, mofussil centres are also places where the services of good and experienced officers are required. Members from southern districts have just now bitterly complained that their hospitals suffer on account of the absence of good and efficient men. Thirdly from the point of view of the officers themselves there should be a constant interchange. Officers in the mofussil centres should periodically be given chances to serve in Madras and equip themselves with the latest knowledge in Medical science. For these reasons I make an earnest appeal to the Hon. Chief Minister to see that all medical officers are every now and then given opportunities to serve in Madras.

Speaking of the retention of Medical officers in the city, I am reminded of the way in which the Vizagapatam Medical College is being neglected. There is absolutely no need for a separate Medical College at Vizagapatam. But the patriotism of the Hon. Members from Andradesa would be kindled if I should urge such a course. But I would only ask those Hon. Members, and the Hon. the Pro Chancellor of the Andhra University (the present Chief Minister), whether they are satisfied with the working of that institution. I believe that institution was started not only to satisfy the pride of the Andhras, but also to provide medical education to Andhra students. It will a matter for supreme satisfaction to my Andhra friends to read the latest administration report of that College. The whole College is filled with students from Malabar—the Indian states in particular and the number of Andhra students can be counted on one's fingers' ends. The Andhra students flock to the Madras Medical college. What is this state of affairs due to? In my opinion it is because the government do not appoint to the staff of that institution some of our first rate men. We have in the city of Madras some very eminent doctors, men who in their own branch would stand favourable comparison with any one in the whole world. Why not post some of them to the Medical College at Vizag? Mr. President, you will see Andhra students joining that college in larger numbers, if some of them are posted there.

The work of the Vizagapatam Medical College leads me on to another teaching institution. I mean the Lady Willingdon Medical School for Women. Whatever my esteemed friend Dr. Natesa Mudaliar may say I feel strongly that there is absolutely no need for this institution, an institution which has no decent building of its own, an institution which has no hospital attached to it. We are spending on this institution some where about Rs 70,000 annually. Firstly, it is difficult to understand why there should be a seperate institution for girls. When boys and girls are, without any prejudice, studying together in institutions like the Medical College, the Indian School of Medicine, and some

arts colleges as well, I for one am unable to understand the reason why Government prohibit the admission of girls in the Royapuram Medical School, and maintain a separate institution at an enormous cost. The Hon. Minister the other day replying to a question on the floor of this house said that we have not yet come to a stage when co-education can be imparted. In that case why not prohibit co-education in the Medical college and other institutions mentioned by me just a while ago? Therefore that argument of the Hon. Minister falls to the ground. We shall for the sake of argument assume that it is not advisable to make boys and girls to read in one and the same institution. I ask whether it is not possible to impart medical education to the girls now undergoing education in the Lady Willingdon Medical School at a very much cheaper cost? I submit, Sir, that it is possible to cut down our expenditure under this head and yet educate these girls in a separate school. We have in Vellore, North Arcot District, a Mission Medical School run exclusively for girls. It is quite possible for Government to give an additional subsidy to that institution and direct the management to admit more girls than they do at present. In that way Government can impart medical education to girls (in an exclusive manner if they so desire) at considerably less cost.

Mr. President, I have come to the end. I have only briefly to refer to one or two minor points. It is unfortunate that the Surgeon-General should associate himself with certain public health organisations run by Medical officers in their extra-official capacity. A certain officer in the Medical service is the secretary of an association called The National Health Association, of which Her Excellency Lady Beatrix Stanley is the Patron and the Surgeon-General is the Chairman. In that capacity that officer comes into close touch with not only the Surgeon-General but also other heads of the department like the Minister and the Secretary to Government. There is an impression in the minds of those in Medical service that this officer being in this position comes into close contact with the authorities of the department and is able to influence their decisions on matters pertaining to that department. I know the present Surgeon-General too well to believe that he will in his administrative matters be influenced by this officer. Nevertheless, I suggest that it would be better if subordinate officials are prohibited from engaging themselves in any extra-official activities like the secretaryship of The National Health Association.

Lastly I wish to point out to Government that Indian Nurses are not being given equal opportunities with European and Anglo-Indian Nurses It is a matter for satisfaction to note that the number of Indian Nurses trained every year is on the up grade. Yet, places in the Presidency hospitals are treated as the perquisite of European and Anglo-Indian Nurses. Indian Nurses are not given places in these hospitals. The moment they pass out they are sent away to some of the the second rate headquarters hospitals. While on this point I am also reminded of the policy of importing nursing sisters from aboard on high salaries. I request the Government to put an end to that practice and employ Indian girls as sisters, and if need be send a batch of our girls to England for training.

In conclusion I should like to say that the present Chief Minister is in no way responsible for the defects and short comings in the Medical administration that I have pointed out. But, I want the Hon. Chief Minister to devote some attention to this department and try and improve the administration of this department.

BULLETIN
OF THE
SOUTH INDIAN MEDICAL ASSOCIATION.

MARCH 1932.

The Eye in General Medicine.

By G. ZACHARIAH, B A., D.O.M S.,
Ophthalmic Surgeon, Royapuram Hospital.

Ophthalmology is a subject which has intimate relations with every branch of medicine and surgery: It is therefore important for the general practitioner to learn something of these relations so that he may be able to deal more efficiently with the patients that come under his treatment.

The subject may be considered under three main groups:—

1. The normal and the pathological pupil, and its significance in general diseases.

2. The optic pathways and the changes that may be produced by their involvement in certain diseases of the brain.

3. The normal fundus of the eye, and the pathological changes that may occur in it as a result of certain general affections.

THE PUPIL.

Anatomical considerations.—The iris acts as a diaphragm in the eye by shutting out excess of light and by cutting off the marginal rays. To suit these two functions under varying conditions the pupil is alterable in its size. This is accomplished by two muscles in it, the sphincter pupillae and the dilator pupillae.

The sphincter pupillae is controlled from the 3rd nerve nucleus and the dilator by the sympathetic from the cilio-spinal centre of Budge in the cervical spinal cord.

Physiology.—The normal pupil is about 3—5 m.m. in diameter depending upon the age of the invidual and the amount of light falling on it. Normally, the two pupils are equal in size. Occasionally an inequality may be noticed as a congenital condition or rarely in normal individuals.

Methods of examination.—The pupil should be examined as a routine in all general examinations of the body. Such an examination should include an inspection of its form, size and shape and of its reflexes.

The pupils should always be examined under identical conditions of intensity of light. The comparative size of the two pupils should be noted. This is best done in a feeble illumination, for, then, any inequality is more easily made evident.

Reactions of the pupil.—The pupil reacts in two different ways—as a reflex, or in association with other movements of the eye.

Reflexs.—Several reflexes have been described. But the most important is the *light reflex.* The pupil reacts to light by contraction. To elicit this, both eyes should be covered and each eye alternately uncovered, while the patient is asked to look at a distant object.

Consensual reflex is the contraction of the pupil of one eye when light is thrown on the other eye. Other reflexes are certain sensory reactions of the pupil to grief, pain, thought of a bright object, etc.

Associated movements.—The chief of these are movements of the pupil with accommodation and convergence. The pupil contracts when the eye

accommodates and converges. The pupil also contracts on an attempted closure of the lid. A third reaction is that associated with lateral movements of the eye. This is called Tournay's reaction. An inequality of the two pupils is seen when the eyes are turned strongly to the lateral side.

We may now consider pathological modifications that may be seen in the pupil.

MODIFICATIONS OF SIZE AND FORM.

Miosis.—A contracted state of the pupil. This may be noticed under various conditions :

(1) In lesions of the globe.

(2) In certain general intoxications, such as in poisoning by opium, chloral, chloroform, alcohol, etc.

(3) In certain chronic general affections. The most important of these is syphilis. It is especially seen in tabes, and in general paresis. It may also be present in multiple sclerosis, and certain affections of the cord such as syringomyelia, Pott's disease, etc.

Mydriasis.—A dilated state of the pupil. This may occur

(1) In lesions of the globe.

(2) In fractures of the skull or orbit.

(3) In the course of certain general affections. It sometimes seen in tabes less frequently than miosis. It may also be seen in general paresis, meningitis, tumours of the brain, in the late stages of chloroform poisoning and in poisoning by mushrooms.

Anisocoria.—An inequality in the size of two pupils may occasionally be a physiological phenomenon. But most often it is a pathological condition. It is most frequently seen in general paresis. It may also be noticed in tabes, and cerebral syphilis, in tumours, multiple sclerosis, etc. Other conditions in which it may be seen are affections of the pleura and lungs, meningitis, epilepsy, neurasthenia, etc.

Hippus.—Hippus is an alternate incessant and rapid contraction and dilatation of the pupil. It may occasionally be seen in chorea, epilepsy, neurasthenia, etc.

Modifications of the reflexes.—The most important of these is the modification of the *light reflex.* When light reflex is lost we get what is called the Argyll Robertson pupil. Both eyes are generally affected. The pupils are fixed, a little unequal, and do not show direct or consensual reaction. This sign is pre-eminently a sign of a syphilitic or para-syphilitic affection. It is most common therefore in tabes and general paresis. It has also occasionally been noticed in some non-syphilitic affections such as multiple sclerosis, syringomyelia, encephalitis lethargica, in certain cases of poisonings e.g. chloroform, mushrooms, ptomaine poisoning, etc., and in epilepsy, hysteria, etc. In tabes the sign is present in 70—80% of patients. In general paresis, the sign is generally followed by a paresis and later by a paralysis of the accommodation reflex also. We then get a complicated Argyll Robertson pupil. The complicated form is less often seen in tabes.

Loss of consensual reaction is present with an Argyll Robertson pupil or when there is a paralytic mydriasis. When an eye is blind and the blindness is due to local causes in the retina, consensual reaction is lost. But if the blindness is due to cortical causes or to hysteria consensual reaction is present.

Paradoxical pupillary reaction.—Occasionally, the pupil dilates in light. This is seen in dementia paralytica, cerebral syphilis, etc.

Changes in convergence and accommodation reaction.—This reaction may occasionally be lost. When such a loss is associated with loss of light reflex we get a complicated Argyll Robertson pupil. If the light reflex is still present we get an inverse Argyl Robertson pupil.

The Tonic pupil.—A condition called the Tonic pupil has recently been described associated with an absence of tendon reflexes, especially of ankle jerk. The condition is most often unilateral and most generally seen in healthy females. It has nothing to do with syphilis. Its characteristic feature is that the pupil contracts very very slowly to convergence becoming smaller than its fellow ; when convergence is over it slowly dilates again.

THE OPTIC PATHWAYS.

Anatomical considerations.—The optic nerve collecting all the fibres from the retina passes out of the orbit through the optic foramcea. In the orbit it is covered by the three membranes which envelop the brain and the sub-dural and sub-arachnoid spaces are also continued round it. From the foramen the nerve extends to the chiasma.

In this portion it is flattened and rests on the dura and the convexity of the carotid artery. It is covered by the frontal lobe and the internal root of the olfactory nerve from which it is separated by the anterior cerebral artery.

The two optic nerves converge to form the chiasma. At the chiasma they form an intimate anastomosis. The chiasma most often lies over the posterior half of the diaphragm, projecting variously over the dorsum sellæ.

From the chiasma the optic tracts pass backward, diverging as they go and winding round the crura cerebri arrive at the primary optic centres. The primary optic centres consist of the external geniculate body, the anterior corpora quadrigemina, and the optic thalamus. From these centres, certain fibres pass to the nuclei of the 3rd nerve and certain others, forming the large group called the optic radiations, pass to the cerebral cortex in the occipital lobe. This latter group turns outwards into the temporal lobe before turning backwards to the occipital lobe. This is of importance in the diagnosis of lesions in the temporal lobe. Tumours, abscesses, etc., in this position are likely to affect these fibres and produce characteristic field defects. The partial field defects short of hemianopia are especially characteristic of involvement of the optic radiations in this region (Cushing).

The cortical visual centres, lie in the neighbourhood of the Calcerine fissure ; this area is called the area striata. The macula is represented at the posterior poles, the more central retinal area further forwards, and the periphery of the retina in the most anterior portions of the visual cortex.

Fibres in the retina can be divided into three distinct groups—a temporal group, a nasal group and a macular group. At the chiasma, a partial decussation takes place. The fibres of the nasal group of each retina cross over to the other side. A part of the macular fibres also cross. But the temporal group of fibres do not cross. It will thus be seen that impressions from the outside world that come from one side are collected up in each eye in fibres that reach the same side of the cerebral cortex, the right side being represented in the left cerebral hemisphere and *vice versa.* This arrangement of the fibres gives rise to a variety of visual disturbance called *hemianopia.* A lesion anywhere in the optic tract, the primary centres, or visual cortex,

will affect the uncrossed fibres of the same side and the crossed fibres of the opposite side. Thus the temporal side of one retina and the nasal side of the other retina will be affected. Such a defect is called a hemianopia.

Field of vision is that portion of space the objects in which are visible at the same moment during steady fixation of the gaze in one direction (Traquair). The normal limits of the field for white objects are

Outwards	90°
Upwards	65°
Inwards	60°
Downwards	70°

For coloured objects the limits are smaller blue having a larger field than green and red.

Defects of field.—Alteration that may occur in the visual field are : (1) Contraction, (2) Scotomas, (3) Hemianopia. Contraction may be regular and concentric or irregular. Scotomas are blind areas in the field of vision. Normally, the papilla produces a blind area in the field called the Blind Spot. This is situated 15° to the temporal side of the point of fixation and is about 5—6° in extent.

Pathological Scotomas may be subjective or objective. Subjective Scotomas cannot be charted on a field. Objective Scotomas are definite losses in the field. An objective Scotoma may be central. Such are seen in local eye conditions or in affections of the optic nerve or in multiple sclerosis, syphilis, sinus disease, etc.

When one half or a segment of a field is affected we get hemianopia. There are two varieties of hemianopia :

Homonymous hemianopia.

Heteronymous hemianopia.

Homonymous hemianopia is the more commonly observed form. In this condition we get the nasal half of one eye affected along with the temporal half of the other eye. Vision is lost in these areas. Central vision is generally preserved.

A lesion which causes such a condition may affect the optic tract, basal ganglia, or the cortical and sub-cortical areas. Where the optic tract is involved the hemianopia is complete. In lesions of the basal ganglia the hemianopia is partial or incomplete. In lesions of the cortical and sub-cortical areas the hemianopia is always incomplete and often very limited. Sensory aphasia, characterised by a dissociation of words and the objects representing them, is often associated with cortical hemianopia.

The causes of homonymous hemianopia are cerebral syphilis as gummata or an arteritis of vessels (the most frequent cause), tumours of the brain and meninges, tubercle, exostoses, intoxications, and injury.

A heteronymous hemianopia may be bitemporal or binasal. Bitemporal variety is the usual form. Binasal form is rare.

Bitemporal hemianopia is the result of lesions affecting the chiasma. Such conditions are pituitary tumours, dilatation of the 3rd ventricle, etc., or gummi, tubercle, etc., directly affecting it.

Occasionally, hemianopia may be double, producing a tubular field. Central vision is usually preserved. Vascular lesions are the most frequent causes of such a condition.

A superior or an inferior hemianopia may also be occasionally produced.

The Fundus of the Eye.—The normal fundus presents near the centre of

its posterior surface a small circular or slightly oval reddish white area from which vessels are seen to emerge. This is the optic disc or papilla. It is surrounded by two circular lines, one white and lying internally and the other slightly pigmented and lying externally. The papilla is reddish white in colour. Its external or temporal half is paler than the internal or nasal half. It is situated in the same plane as the rest of the fundus and has a small depression in its centre. This depression is called the physiological cup. Normally this depression never occupies the whole extent of the papilla.

From the centre of the papilla arteries, and veins emerge. There are four of each, a superior temporal and a nasal and an inferior temporal and a nasal. The veins appear larger than the arteries and are darker in colour.

The general colour of the fundus is dull red; this colour is due to the highly vascular choroid which lies behind the transparent retina. The colour varies according to the amount of pigment in the choroidal stroma and in the retinal pigment layer.

At the posterior pole of the eye about 1½ to 2 disc diameters to the temporal side of the papilla is the macular region. In young people it appears as an oval area of a darker colour than the rest of the fundus and surrounded by a bright circle, a little larger than the papilla. There are no vessels in this area.

The central vessels divide and subdivide and go to all parts of the fundus. These vessels can be followed to their termination.

Modification of the normal appearance of the fundus are observed under disease conditions. Such modification may affect the papilla, the macula or the rest of the fundus.

Changes in the papilla.—The papilla may show a loss of clearness of its margin. When this loss is slight we get the condition called optic neuritis. In optic neuritis the papilla appears hyperaemic, is slightly oedematous and its margins are ill defined. The veins becomes larger than normal. Vision is rapidly diminished and field markedly contracted.

We get an optic neuritis in (1) syphilis, (2) infectious diseases, such as eruptive fevers, pneumonia, influenza, (3) cerebro spinal meningitis, (4) albuminuria, diabetes, etc., (5) menstrual troubles in the female, or in the course of pregnancy or lactation.

Where the blurring of the papillary margin is very marked we get *papilloedema.* In this condition the papilla is elevated, its limits are blurred, and its diameter increased to 2 or 3 times the original size. The veins are much enlarged and tortuous. The arteries are almost or completely obliterated. There are fine haemorrhages on the surface of the papilla.

Vision and field remain normal at first, even when there is considerable swelling. But after a variable period the field begins to contract. Optic atrophy may later set in. The oedema subsides, papilla becomes grey, veins become smaller and vision and field deteriorate.

Causes of papilloedema may be general and local. General causes are the more important. Of these the foremost are tumours of the brain. Other causes are basal meningitis, abscess of the brain, fractures of the base of the skull, certain cranial malformations, etc.

The papilla may show modifications of colour. One half of the papilla, usually the temporal half may become much paler than the other half. The most important general conditions

producing such a change are chronic intoxications from tobacco, alcohol and lead and multiple sclerosis.

The whole surface of the papilla may become white. We then get optic atrophy. Optic atrophy may be primary or secondary.

In *primary atrophy* (also called simple atrophy), the papilla first becomes pale and later white. Its margins are clear and sharp. Vessels are little altered. The most important cause of this condition is tabes. In tabes atrophy is generally preceded by an Argyll Robertson pupil. A simple atrophy is also seen in general paresis, multiple sclerosis, tumours of the pituitary, destructive lesions affecting the nerve, etc.

In *secondary atrophy* the papilla is white and its borders are irregular. Vessels are altered. Veins are tortuous, and arteries show white lines along their borders. The condition is secondary to an optic neuritis or a papilloedema.

We may also get optic atrophy following Glaucoma, vascular lesions or sometimes after profuse haemorrhages or in poisoning from certain drugs. Atrophy following profuse haemorrhages generally developes very quickly, in 2 or 3 days. There is complete blindness with it.

Changes in the rest of the fundus may affect the fundus back ground or the vessels or both.

Spots of various colours may be seen in the fundus. White spots generally mean areas of atrophy. Yellow spots mean exudation. Black spots are seen when pigmentary changes take place and red spots denote haemorrhage.

Vessel changes affect arteries and veins. The calibre of the arteries may become narrowed; white lines may appear along their borders. An arterial pulse may occasionally be seen. Normally, no pulsation is noticed in the retinal arteries. Veins may show a dilatation.

When spots of exudation appear in the retina we get retinitis. The three principle general affections in which a retinitis may develop are albuminuria, arterio-sclerosis and diabetes.

Albuminuric retinitis.—This may be acute or chronic. The acute form is seen in acute parenchymatous nephritis, and in the albuminuria of pregnancy. The chronic form appears in chronic interstitial nephritis.

Retinitis of Pregnancy.—This occurs generally in the later pregnancies. It is probably due to a toxin which affects the retina, kidneys, liver and other organs. The onset is sudden. There is a good deal of exudation into the retina. The papilla is hyperaemic and oedematous. There are haemorrhages into the retina, most frequently in the central region, and spots of exudation. These spots are fairly large and may sometimes be arranged in the form of a star figure round the macula. Veins are engorged, and occasionally a detachment of retina may also occur. Prognosis is generally good. When the cause is removed, symptoms subside and vision is restored. If nephritis continues after pregnancy optic atrophy may supervene.

Retinitis of chronic nephritis.—This is of the chronic variety. Its onset is more gradual. The papilla may show a slight oedema and its margins become indistinct. Fine haemorrhages may be present. In the retina these develop a fair number of superficial clear brilliant white spots of variable size, chiefly round the papilla and macula. The spots in the macular area are often arranged in a star figure, but it is rarely a complete star. Prognosis is grave in these cases, death coming on

within 2 or 3 years after the appearance of the retinitis.

Retinitis in arterio—sclerosis.—In the great majority of cases of general arterio—sclerosis evidence of the disease can be detected early in the retinal arteries, by the ophthalmoscope. Hence arterio--sclerosis is one of those diseases which is often first discovered by the ophthalmologist.

In the early stages changes noticed in the retinal vessels are:

1. The translucency of the vessels is lost first.

2. Next, the thickened artery presses on the vein where it crosses it and the blood is dammed back beyond the crossing.

3. The vein becomes deflected beyond the crossing.

4. The reflex from the arteries is broadened, and there is an increase in the brightness.

5. The light streak becomes dotted or beaded.

6. The smaller vessels become tortuous.

7. White lines are seen on either side of the artery, first at the crossings.

8. Later the white lines are seen in other places also.

9. In more advanced cases narrowing of the lumen of the vessels may appear.

10. Aneurysmal dilatation of the veins may also sometimes be seen.

The disc has a congested appearance. After these conditions have been in existence for sometime, exudates in the retinal tissues appear,—a retinitis develops. It indicates a later stage in the progress of the disease. Small, white, roughly circular, sharply outlined spots are seen here and there mostly near the papilla and the macula. Occasionally, an incomplete star figure may also be formed.

Diabetic Retinitis.—This shows a similar appearance to that seen in nephritis. But in diabetes the retinal patches are sharp-edged, solid, waxy looking and distributed irregularly. Oedema is very slight or absent. Hæmorrhages are more frequent and more extensive and generally occur in the deeper layers.

Generally, the blood pressure is increased and albumin may also be present in the urine. It is usually seen in elderly people. Prognosis is not so bad as in chronic nephritis. A special feature is that when retinitis is present knee-jerks are generally absent.

Other changes which may occur in the eye in diabetes may also be mentioned here. These are:—

1. Accommodative troubles—generally slight.

2. Changes in refraction.—Myopic changes are not uncommon in old people. It is a good rule to remember that if myopia is seen to develop rapidly in persons beyond 50, diabetes should be suspected.

3. Cataract fairly common in diabetes. But often, what is ordinarily considered as a diabetic cataract is only an ordinary cataract in a diabetic person, the opacification having been influenced by the presence of sugar and general nutritional trouble but not having any other relation to diabetes.

4. Retinal hæmorrhages frequently.

5. Iritis occasionally.

6. Paralysis of ocular muscles sometimes.

The eye helps in another way in helping to group our patients into the now recognised groups of vagotonic and sympathetico-tonic individuals. This is of importance in our study of diseases and the methods of treatment. One method by which this

differentiation is made is by what is called the Oculo-cardiac reflex. This reflex consists in a slowing of the heart by 5 to 8 beats per minute, a diminution of arterial tension and respiration, and sometimes nausea, by a compression of the eyeball. In vagotonics this reflex is exaggerated. Compression causes pulse to fall by 10 to 16. In sympathetico-tonics, on the other hand there is no effect on the pulse or it may be even be exaggerated.

The Third Andhra Medical Conference.

GUNTUR,
10th March 1933.

DEAR DOCTOR,

The Third Andhra Medical Conference is to be held this year at Guntur in Easter week on the 17th and 18th of April.

In addition to the usual business of discussing the welfare of the Medical Practitioners in Andhra Desa, it has been arranged to have a number of interesting papers by Medical men of standing, as well as demonstrations of interesting Clinical cases.

Arrangements are also made for an Exhibition of Medical and Surgical appliances and drugs of both Indian and Foreign manufactures.

We request all Medical practitioners in the Andhra Districts and such others outside the Province who have an interest in helping to create a unified Medical profession in Andhra Desa, to help us by attending the Conference as Delegates and helping us to arrive at decisions in the best interests of the profession and also by reading papers on important or interesting subjects, in the Conference.

We further request that all doctors in the Guntur District will enroll themselves as members of the Reception Committee and help to make the Conference a success.

GUNTUR,
Dated 14th March 1933.

Secretaries :—**Reception Committee.**

C. HANUMANTHA RAO
P. VEERAYYA
T. CHIDANANDAM

BULLETIN NO. 3.

THE EXHIBITION.

Arrangements are made for holding an exhibition, in connection with the Conference, of Medical and Surgical appliances, drugs and such other articles as are of interest to medical men.

The location will be in the same buildings as that of the conference and will be open from 16th to 19th April.

The Exhibition will consist of different sections, Indian and Non-Indian etc., and it is intended that as far as possible only manufacturers or their representatives shall take stalls to display their goods.

One Gold Medal and One Silver Medal for each section in addition to Certificates to the best Exhibitor as decided upon by the Committee.

A nominal fee to cover the expenses will be charged, depending on the accommodation required.

Application from Firms stating the extent of space they require and class of products for which they want, drugs, chemicals, surgical goods etc., Indian or Non-Indian, should be sent to the secretaries before the 1st April 1933, who will supply further details on request.

The committee guarantees only the space and arrangements for lighting and while willing to help every exhibitor in the arrangements for the display of their products, will not themselves hold responsibility for the same.

A *limited* extent of space will be open for advertisement, to firms, on the programmes and other hand bills issued by the committee at the conference. Quotations can be had on request.

ASSOCIATION NEWS

Bezwada Medical Association.

In connection with the Association Day of the Bezwada Medical Association, which was celebrated on the 5th March. Dr. D. S. Ramachandra Rao delivered and address on the "Medical Practitioner and Modern India" at Durga Vilas, Rao Bahadur Dr. T. S. Thirumurthi presiding.

The learned lecturer traced briefly the history of medicine from the earliest times when the treatment was the most primitive and consisted of invocations and incantations which threw a sort of halo around the medical man, who was also regarded as the man of magic. Healing which was once an art became, as years rolled by, a science and to-day they had the science of medicine. The lecturer then dealt with the Oriental and the Western systems of medicine and pleaded for greater efficiency on the part of the medical practitioners. The public had a right to expect a higher standard of skill from the physician. It was the apathy of the Indian patient that was largely responsible for the low professional efficiency of the medical man in India. The lecturer also hoped that under the new constitution measures would be adopted providing for the State Medical Insurance Scheme under which medical treatment would be ensured for every labourer at the hands of a man of his choice.

Dr. T. S. Thirumurthi while endorsing the views of the lecturer, appealed to the members of his profession, to follow up the noble ideals set out by the lecturer.

(*The Hindu.*)

The Trichinopoly District Medical Association.

A monthly meeting of the above Association was held on Saturday the 25th March 1933 at 5-30 p.m. in the E. R. High School, Teppakulam, Trichinopoly. About 40 members were present. Drs. K. Ramaswamy and V. Subramanyam were "At Home" to the members.

There was a lively discussion on Medical Ethics in which most of the Doctors present took part. Further discussion and decision were posponed to the next meeting. Dr. P. Chockkalingam Pillay, Group Leprosy Officer demonstrated Magic Lantern Slides on Leprosy and explained the different Slides. After that Mr. L. S. Sarathy Representative of the Havero-Trading-Company showed Cinema Films on resection of the rectum for Cancer and a film on Malaria.

Dr. S. Padmanabha Sarma the President of the Association who presided on the occasion thanked Dr. Chockkalingam Pillay and Mr. L. S. P. Sarathy for their excellent demonstrations.

Dr. P. A. S. Raghavan the Secretary of the Association proposed a vote of thanks to the hosts, the President and the members present. Then the meeting terminated.

Hyderabad Medical Association.

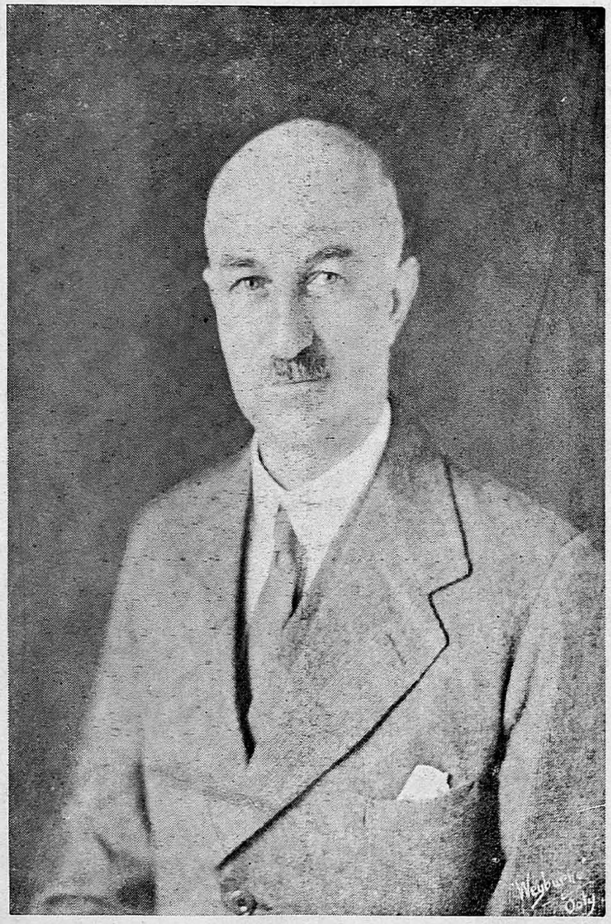
Under the auspices of the Hyderabad (Deccan). Branch of the Indian Medical Asscociation, Sir P. C. Ray, Professor of Chemistry, who is on a visit to this place for delivering Extension Lectures, delivered on the 7th instant an interesting address at the Reddi Vidyalaya Hall, Hyderabad, on "The Relation between the chemical constitution of drugs and their physiological properties and recent progress in the chemistry of vitamins." There was a large gathering present, and Prof. Hardikar of the Osmania Medical

College, took the chair. He remarked that the late Dr. Aghoranath Chattopadhyaya, Professor of the Nizam's College and father of Mrs. Sarojini Naidu, was a coworker of his. In ancient India, Arabia and even in medieval Europe, chemistry was a hand-maid of medicine, and the two subjects were closely inter-related. France led the world in chemical research, but lost its place to Germany and to-day England and Germany were striving for supremacy in the subject. The lecturer pointed out the properties of various chemical compounds, and remarked that alcohol, which was forbidden by Islam, was sanctioned by Hindu scriptures for medicinal purposes. In recent times huge chemical combines had come into existence. These companies engaged the services of chemists to investigate the properties of various compounds and exploit them, a matter which ought to engage the attention of Indian scientists with a view to the adoption of similar methods. Emile Fisher had done more than any one else to carry chemical research work into perfection and his was a name to conjure with. Speaking of India, Sir P. C. Ray expressed satisfaction that in recent years India was realising the importance of chemical research. It was for the medical profession to help the chemists by their help and co-operation. Sir P. C. Ray referred to the work of Dr. Guha, of the Calcutta University, who after proceeding to England and receiving guidance from Sir Richard Gregory, Editor of "Nature", had returned to India and had important discoveries in the properties of vitamin B-1. So important have been Dr. Guha's discoveries that foreign companies, both English and American, had offered him tempting sums for rights of patent. In concluding the address, Acharya Ray made a fervent appeal to the younger generation of Indians.

Prof. Hardikar remarked that Sir P. C. Ray's presence was like that of certain chemicals, it energised and vitalised others and he appealed to the students to proceed to Calcutta and sit at the feet of the great chemist, than whom no one had done more for chemical research in India. In garlanding the lecturer, Major M. G. Naidu, President of the Indian Medical Congress, expressed the thanks of the public for having delivered the address at so short a notice.

Reviews.

The Royapuram Medico is the latest addition to the School Magazines in this presidency. As its name implies it is the journal of its Royapuram Medical School. The first number contains a very interesting and valuable foreword by Surgeon-General Sprawson whose interest in medical education and whose anxiety and enthusiasm for the improvement of the medical profession in this presidency is well known. It is happy that this new venture synchronises with the improvement of the standards of the school education here. The Medico is a model of what a school journal should be. A clinical lecture and doings of the students in various spheres of the school activities form the main contents. We hope to see in its future numbers more and more articles on the doings of the old students in their present spheres of life, sketches, short stories, experiences and such interesting matter which will bind together the alumni of the Royapuram Medical School and its associate institutions. We have only to give one warning—that it will not attempt to be a scientific journal, nor take part in sectarian agitations which might well be left to others, but devote itself to foster the *esprit de corps* which exists between the past and present students of this great medical institution. We wish this journal every success.



Surgeon-General
C. A. SPRAWSON, C.I.E., V.H.S., I.M.S.,
who is to be the next Director-General
of the Indian Medical Service.